

# Monthly Progress Report for Corrective Measures Study for Material Disposal Area H, Potential Release Site 54-004, at Technical Area 54 April 2002

Prepared by the Material Disposal Areas Focus Area

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## **1.0 INTRODUCTION**

This progress report summarizes Los Alamos National Laboratory (the Laboratory) activities completed during April 2002 on the corrective measures study (CMS) for Material Disposal Area (MDA) H, Potential Release Site (PRS) 54-004, at Technical Area 54. The completed activities are described in the CMS plan (Environmental Restoration Project 2001, 70319), approved by the New Mexico Environment Department (NMED) Hazardous Waste Bureau (HWB) on December 7, 2001. These activities and other related operations are summarized below.

## **2.0 DESCRIPTION OF ACTIVITIES AND CONTACTS**

### **High-Performing Team Activities**

The MDA High-Performing Team (HPT) met on Tuesday April 23, 2002, to review the models and modeling assumptions used in the MDA H CMS report. NMED-HWB staff expressed concern about the use of models and assumptions for such a relatively simple site and the fact that NMED-HWB may not be in the position to approve the models or the assumptions used for the models as part of the MDA H CMS report. The Laboratory agreed to review and revise the modeling discussion in Section 3 and in the corresponding modeling appendices.

### **Resource Conservation and Recovery Act Facility Investigation Addendum**

The Laboratory received analytical data for vadose zone samples collected during December 2001 from boreholes 54-1023, 54-15461, and 54-15462. Data validation is scheduled to be completed by early May. Work continued on the request for information (RFI) addendum.

### **CMS Report**

The Laboratory continued comment resolution with the internal peer reviewers, specifically with reviewers from the Regulatory Compliance Focus Area on Sections 3, 4, and 5 of the MDA H CMS report.

### **Public and Stakeholder Involvement**

During the February 14, 2002, focus group meeting, George Rice was selected by focus group members to be the independent peer reviewer for the MDA H CMS Report. Mr. Rice was contacted several times in March about his availability to conduct the independent peer review. Mr. Rice notified the Laboratory in April 2002 that he would be available to conduct the independent peer review. The Laboratory will issue a purchase requisition for his services in May. Mr. Rice's review report will be sent directly to Bruce Poster who is a facilitator for the focus group. The Laboratory will also be copied on his report.

## **3.0 PERCENTAGE OF CMS COMPLETED**

The Laboratory estimates that 82% of the CMS has been completed.

#### 4.0 PROBLEMS ENCOUNTERED/ACTIONS TO RECTIFY PROBLEMS

The status of four of the five problems described in the first two progress reports is unchanged (Environmental Restoration Project 2002, 71479; Environmental Restoration Project 2002, 72612). Problem 4 has been rectified as described below. The problems and actions to rectify them are as follows:

*Problem 1.* NMED has not yet concurred with the Laboratory's proposed site conceptual model, including assumptions about site geology and hydrogeology.

*Problem 2.* The target levels (for modeling) have not yet been identified and agreed upon.

*Problem 3.* DOE and the Environmental Protection Agency base the assessment of risk from radionuclides on dose; NMED bases the assessment of risk from all hazardous constituents in excess of an incremental cancer risk of 10<sup>-5</sup>.

*Actions to Rectify Problems 1, 2, and 3.* The MDA HPT scheduled meetings with modeling and regulatory compliance personnel during March and April 2002 to review the basis for the models, assumptions about site geology and hydrology, contaminant fate and transport, and regulatory issues. Additional meetings will be proposed.

*Problem 4.* The Concerned Citizens for Nuclear Safety and other focus group members have requested that an independent review of the MDA H CMS be conducted.

*Action to Rectify Problem 4.* Focus group members were provided with the resumé of seven individuals to review the MDA H CMS report before the February 26, 2002, focus group meeting. The top three candidates for independent reviewers were Stan Peterson, George Rice, and Bernd Franke, each of whom was discussed during the meeting. Mr. Rice was selected as the independent peer reviewer and has agreed to perform the independent peer review.

*Problem 5.* NMED requested that the Laboratory demonstrate how the proposed corrective measure will meet requirements stated in 40 CFR Part 264, Subparts G and F, "Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities." The closure/postclosure care requirements are deemed applicable to MDA H primarily because shaft 9 is considered a *regulated unit*.

*Action to Rectify Problem 5.* The CMS report for MDA H will include a crosswalk, which will identify applicable closure/postclosure care requirements and show how the proposed corrective measure satisfies each requirement. The crosswalk will also reference the specific CMS report section describing how the different aspects of the proposed corrective measure meet the corresponding closure/postclosure care requirements.

#### 5.0 KEY PERSONNEL CHANGES

Eliza Frank resigned from the NMED-HWB as of April 26, 2002, and Neelam Dhawan is the main NMED-HWB contact. The remainder of the MDA H CMS contacts is unchanged from the list provided in the first progress report (Environmental Restoration Project 2002, 71479).

## **6.0 PROJECTED WORK FOR MAY 2002**

### **HPT Proceedings and Decisions**

There are no HPT meetings scheduled for May 2002. The next meeting will be scheduled after the sections in the MDA H CMS Report on Modeling and Alternative Evaluation are updated and edited.

### **Resource Conservation and Recovery Act Facility Investigation Report and Addendum**

NMED will continue to review the Laboratory's response to the RSI on the MDA H Resource Conservation and Recovery facility investigation (RFI) report, and the Laboratory will complete and submit the RFI Addendum by May 30, 2002.

### **CMS Report**

Technical editing of the CMS report will begin during May concurrent with addressing NMED-HWB concerns regarding modeling and comment resolution with Regulatory Compliance Focus Area staff on Sections 3, 4, and 5 of the CMS report describing how the different aspects of the proposed corrective measure will meet the corresponding closure/postclosure care requirements of 40 CFR Part 264, Subparts F and G.

### **Public and Stakeholder Involvement**

A purchase requisition will be issued for the independent peer review of the CMS report. The focus group agreed tentatively to meet on June 4, 2002, at the Cities of Gold from 3:30 to 6:30 P.M. That meeting date will be moved to a later date to allow Mr. Rice sufficient time to conduct an independent peer review of the CMS report. Before the next meeting, the group will receive the results of the independent peer review and the RFI Addendum. During the meeting, the group is expected to provide a final recommendation(s) to the Laboratory on the preferred corrective measure alternative.

### **References**

Environmental Restoration Project, March 2001. "Corrective Measures Study Plan for Material Disposal Area H at Technical Area 54," Los Alamos National Laboratory report LA-UR-01-1629, Los Alamos, New Mexico. (Environmental Restoration Project 2001, 70319)

Environmental Restoration Project, February 2002. "Progress Report for Corrective Measures Study for Material Disposal Area H, Potential Release Site 54-004, at Technical Area 54, April through December 2001," Los Alamos National Laboratory report LA-UR-02-0328, Los Alamos, New Mexico. (Environmental Restoration Project 2002, 71479)

Environmental Restoration Project, March 2002. "Monthly Progress Report for Corrective Measures Study for Material Disposal Area H, Potential Release Site 54-004, at Technical Area 54 February 2002," Los Alamos National Laboratory report LA-UR-02-1454, Los Alamos, New Mexico. (Environmental Restoration Project 2002, 72612)

Environmental Restoration Project, April 2002. "Monthly Progress Report for Corrective Measures Study for Material Disposal Area H, Potential Release Site 54-004, at Technical Area 54 March 2002," Los Alamos National Laboratory report LA-UR-02-2471, Los Alamos, New Mexico. (Environmental Restoration Project 2002, 72712)

Young, J., December 3, 2001. "Additional Fieldwork at MDA H, 54-004," New Mexico Department letter HWB-LANL-01-001 to J. Browne and M. Johansen from J. Young, Santa Fe, New Mexico. (Young 2001, 71537)